suites and to provide reports of meetings of interest, preferably together with one or two photographs. All technical articles will be scrutinised both for scientific content and presentational style by the Editor (or his nominee) together with at least one other member of the CCP13 Steering Panel. In this way we hope to maintain high standards. Remember that the Newsletter not only goes to other fibre diffractionists, but also to various members of the Research Council Secretariats and to other funding agencies.

### **International Cooperation**

Although these CCPs are UK funded projects, there is a very strong interest in making them international through cooperation with interested scientists in other countries. A natural link for CCP13, for example, exists with the Special Interest Group (SIG) in Fibre Diffraction of the American Crystallographic Association and possibly with some American synchrotron users (CHESS). Others exist

with the ESRF at Grenoble and with the Photon Factory in Japan.

#### **Retirements and New Elections**

At the 1997 Annual General Meeting of CCP13, Professor Tony Ryan (Sheffield) was re-elected as a Committee member until the year 2000 and Dr. Bob Pendlebury (ICI, Wilton Centre) was elected as a replacement for Rob Rule who had resigned. This year sees the end of the periods of office of Mike Ferenczi and Trevor Forsyth. Both are prepared to stand for re-election. Other existing Committee members all continue at least until 1999. There are therefore two positions to be filled at the CCP13 Annual General Meeting in May. Any nominations for election to the Committee can be sent to the CCP13 Secretary, Dr. Geoff Mant, before the May 1998 meeting.

John Squire

## IF YOU ARE A FIBRE DIFFRACTIONIST STUDYING SYNTHETIC OR BIOLOGICAL POLYMERS. THIS CCP IS FOR YOU. PLEASE HELP TO MAKE IT WORK!

### International Conference on Neutron Scattering Toronto, Canada, 17-21 August 1997

This meeting attracted approximately 700 delegates from all walks of the neutron scattering world, and included sessions on biology, polymers, materials, liquids, surfaces and industrial applications. The programme was diverse and highlighted the fact that there is enormous scope for the use of neutron scattering by the CCP13/NCD community. In the Biology sessions there were presentations on computational/neutron studies of protein folding and dynamics (Jeremy Smith, Commissariat a l'Energie Atomique), quasi-Laue crystallography (Dean Myles, ILL), membrane studies (Jeremy Bradshaw, ILL), small angle neutron scattering (S. Krueger, NIST), as well a lively poster session that included presentations on actin (Ivkov, University of Maryland), DNA hydration (Shotton, Pope, Keele University), and ribosomes. In the polymer session there were talks on block copolymer phase behaviour (Bates, Minnesota), relaxation processes in glass-



forming polymers (Richter, Julich), nucleation and growth in polymer mixtures (Balsara, Polytechnic University, New York).

As with all large meetings there is often a feeling that it will be impossible to remember all of the interesting work that was presented. However, the highlight of the meeting, a trip across Lake Ontario from Toronto to Niagara, in a very odd way, helped with this problem. The boat was laid out with enormous quantities of exotic food and everybody duly filled themselves up. There then followed a crossing that was by anybody's standards horrendously rough. Most people on the boat were very ill and unfortunately three people were hospitalised after the journey. Some delegates felt well enough after getting off the boat to be amused by the name of the carrier (see photograph).

The idea was that after the crossing, delegates were to get on another boat (The Maid of the Mist) which was to give a unique approach to the base of Niagara Falls. Enthusiasm for this seemed to be low however, and this part of the outing was cancelled. After a quick glimpse of the falls, everybody was bundled onto a coach and delivered straight back to Toronto where the conference dinner awaited them.

Whilst the outing did not quite work out as the organisers planned, most delegates (probably with at least three exceptions) were able to look back on the trip with some amusement, although tinged with concern for the more seriously affected. The meeting was an enormous success scientifically and the main entertainment event ensured that it will never be forgotten!

Trevor Forsyth

# The Fourth Synchrotron Radiation School UMIST - Daresbury Laboratory - University of Wales 5-17 January 1997

A fresh winter's day in Manchester was the starting point for the fourth Synchrotron Radiation School this January. The only problem about repeating things is that you have to reconcile trying something new with undoing something that has already worked. The timing, location, organisation and expanded programme of the Synchrotron Radiation School constituted a new departure. It proved that students will come to a northern city in the UK in the first week of a new year and work solidly from 9 in the morning often until 9 at night. The reward of course is that one week later they can work even longer hours at the Synchrotron Radiation Source at Daresbury Laboratory coping with practicals and data analysis!

Where the previous three Synchrotron Radiation Schools have been held at Keele University, the University of Manchester Institute of Science and Technology hosted the first week of lectures and tutorials of SRSIV. These were given in the Manchester Materials Science Centre under the watchful eye of Tony Ryan (who also directed students to the bright lights of Manchester after hours). Once Storage Rings, Crystalline Symmetry and Disorder had been set aside, students were introduced to Diffraction Theory including Magnetic Diffraction, the basis of Small Angle Scattering and Fibre Diffraction, the theory of XAFS and of Photoemission. The course programme then moved

on to Synchrotron Radiation X-ray and UV optics (crystals, mirrors and gratings) and detectors (solid state, wire and also electron varieties). This comprehensive background of theory instrumentation provided the natural lead-in to the formal experimental arrangements now found at most SR centres. Experiments covered Diffraction both from powders, protein crystals and microcrystals; X-ray Scattering from polymers and bio-fibres; XAFS from materials and SEXAFS from single crystal surfaces; and last but not least gas phase photoabsorption and photoemission spectroscopy.

By this time the School had moved on to Daresbury Laboratory via a short tour of the English Peak District. This included appropriately enough a visit to Styal Mill - one of the best preserved examples of intensive 19th century factory life from the height of the Industrial Revolution - surely a foretaste of the synchrotron radiation experience to come! Practical sessions at the SRS were brought together by Bob Bilsborrow and mirrored the principal diffraction, scattering and spectroscopy experiments featured previously in the lecture programme. experiments were designed to introduce students to experimental procedure as well as to data handling. Following the example of a previous SR school, first thing each morning the SRS machine crew demonstrated the start up of the source from linac, to